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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

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Distribution	Environmental Remedial Action	N/A
5. Proj./Prog./Dept./Div.:	**6. Cog. Engr.:**	**7. Purchase Order No.:**
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8. Originator Remarks: Approval/Release		**9. Equip./Component No.:** N/A
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(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Impact Level	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-EN-PD-009		0	100-IU-1 Operable Expedited Response Proposal	4	2		

16. KEY

Impact Level (F)	Reason for Transmittal (G)	Disposition (H) & (I)
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(G) Reason	(H) Disp.	(J) Name (K) Signature (L) Date (M) MSIN	(J) Name (K) Signature (L) Date (M) MSIN	(G) Reason	(H) Disp.
1/2	1	Cog.Eng. P. J. Valcich P Valcich 4/14-55			
1/2	1	Cog. Mgr. W. L. Johnson W L Johnson 4/14-55			
		QA			
		Safety			
		Env.			
3		EDMC (2) H4-22			
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18.	19.	20.	21. DOE APPROVAL (if required) Ltr. No.
P. J. Valcich P Valcich 4/2/92 Signature of EDT Originator — Date	V Authorized Representative for Receiving Organization — Date	W. L. Johnson W L Johnson 4/2/92 Cognizant/Project Engineer's Manager — Date	[] Approved [] Approved w/comments [] Disapproved w/comments

BD-7400-172-1 (02/89)

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INFORMATION RELEASE REQUEST

References: WHC-CM-3-4

COMPLETE FOR ALL TYPES OF RELEASE

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- [ ] Speech or Presentation (Check only one suffix)
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- [ ] Reference
- [X] Technical Report
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- [ ] Manual
- [ ] Brochure/Flier
- [ ] Software/Database
- [ ] Controlled Database
- [ ] Other

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CHECKLIST FOR SIGNATORIES

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References Available to Intended Audience	[X]	[ ]	P. J. Valcich	P J Valcich	4/2/92
Transmit to DOE-HQ/Office of Scientific and Technical Information	[ ]	[X]			

Information conforms to all applicable requirements. The above information is certified to be correct.

Author/Requestor (Printed/Signature) Date: P. J. Valcich — P J Valcich — 4/2/92

Responsible Manager (Printed/Signature) Date: W. L. Johnson — W L Johnson — 4/2/92

Intended Audience

[ ] Internal [ ] Sponsor [X] External

INFORMATION RELEASE ADMINISTRATION APPROVAL STAMP

Stamp is required before release. Release is contingent upon resolution of mandatory comments.

APPROVED FOR RELEASE OFFICIAL DOCUMENT Date 4/13/92

Date Received 4/13/92

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SUPPORTING DOCUMENT

1. Total Pages 25

2. Title	3. Number	4. Rev No.
100-IU-1 Operable Unit Proposed Expedited Response Action	WHC-SD-EN-PD-009	0

5. Key Words

Riverland Wash Pit, Munition Cache

APPROVED FOR PUBLIC RELEASE
D. Birkland 4/17/92

6. Author

Name: P. J. Valcich

P J Valcich 4/2/92
Signature

Organization/Charge Code 81225/PC31A

7. Abstract

The report proposes a 100-IU-1 Operable Unit Expediated Response Action. This Unit's waste sites require confirmatory investigations and probably some minor clean up activities. The Unit will then be ready for a Record of Decision.

8. PURPOSE AND USE OF DOCUMENT - This document was prepared for use within the U.S. Department of Energy and its contractors. It is to be used only to perform, direct, or integrate work under U.S. Department of Energy contracts. This document is not approved for public release until reviewed.

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10. RELEASE STAMP

OFFICIAL RELEASE
BY WHC
DATE JUL 08 1992
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9. Impact Level 4

A-6400-073 (11/91) (EF) WEF124

CONTENTS

ATTACHMENTS

FIGURE

1.0 INTRODUCTION

1.1 PURPOSE

This document provides information for conducting an Expedited Response Action (ERA) at the River Rail Wash Pit and 600 Area Army Munitions Burial Site in the 100-IU-1 Operable Unit as requested by the U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) (Attachment 1). This information provides the EPA and Ecology a general understanding of the proposed ERA.

If the ERA process is continued, a comprehensive ERA proposal will be prepared in accordance with the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al. 1990). This will allow for public involvement and regulatory approval of the ERA prior to actual implementation of the proposed response action.

1.2 BACKGROUND

The 100-IU-1 Operable Unit (about 15 mi^2) is west of Washington State Route 240 and north of Washington State Highway 24 (Figure 1). Currently, the area includes the two sites from WIDS (Attachment 2), pre-1940 homesteads, the remains of an anti-aircraft artillery position, and railroad facilities known as the "Riverland Yards".

Riverland operated from 1943 until about 1957. The Riverland Yard was established as a temporary railroad support site with maintenance facilities. The maintenance facilities included the River Rail Wash Pit, maintenance shop, and a 12,000-gal underground diesel fuel tank apparently still in the ground. The River Rail Wash Pit was used for railroad rolling stock radiological decontamination prior to maintenance work performance.

The 600 Area Army Munitions Burial Site is a shallow cache (2 ft X 3 ft X 2 ft deep). The wooden crates and contents were removed on May 22, 1986, and transported to the Yakima Firing Range for destruction.

Around 1963, the railroad and anti-aircraft gun facilities were demolished.

2.0 SITE DESCRIPTION

In 1961 the U.S. Army's Hanford Site air defense role was eliminated. Defense sites were decommissioned in a manner considered appropriate by the Atomic Energy Commission and U.S. Department of Defense. At that time, most buildings and structures were sold for salvage or demolished.

The Riverland Yards site was decontaminated, released from radiation zone status, and the buildings sold to the public in 1963.

A recent 100-IU-1 operable unit reconnaissance identified the following locations:

- Remains of one anti aircraft gun site (H-70)
- Remains of two homestead sites
- 600 Area Army Munitions burial site
- Riverland railroad car wash pit (decontaminated and released radiation zone)
- Potentially suspect riverland underground 12,000-gal diesel fuel tank.

Potential hazards identified were categorized as either physical or environmental. Typical physical hazards include nuisance tripping hazards such as protruding steel cables next to the Riverland Yards water well. No apparent environmental hazards were found during the reconnaissance. Potential environmental hazards may occur at the railroad car wash pit, underground diesel fuel tank, and anti-aircraft artillery military landfill.

3.0 ERA BENEFIT

The public awareness of activities influencing the environment continues to draw considerable attention to the Hanford Site. Many of the concerns expressed by the public regarding the Hanford Site address the issue of the further spread of contamination in the environment. Implementing an expedited response at these sites prior to eventual remediation as required by the Tri-Party Agreement, could reduce or eliminate these concerns in the interim. This ERA would also benefit all parties concerned (regulatory agencies, the public, and DOE) by demonstrating the DOE's commitment to a bias for action.

4.0 ERA CONCEPT

4.1 GOAL

The goal of this ERA is to minimize or eliminate the potential environmental hazards posed by the sites within the 100-IU-1 Operable Unit. Wastes removed from the area will be disposed in accordance with current Westinghouse Hanford and regulatory requirements. In addition, these actions could lead to the issuance of a record of decision for the 100-IU-1 Operable Unit, thus removing the operable unit from further cleanup actions mandated by the Tri-Party Agreement.

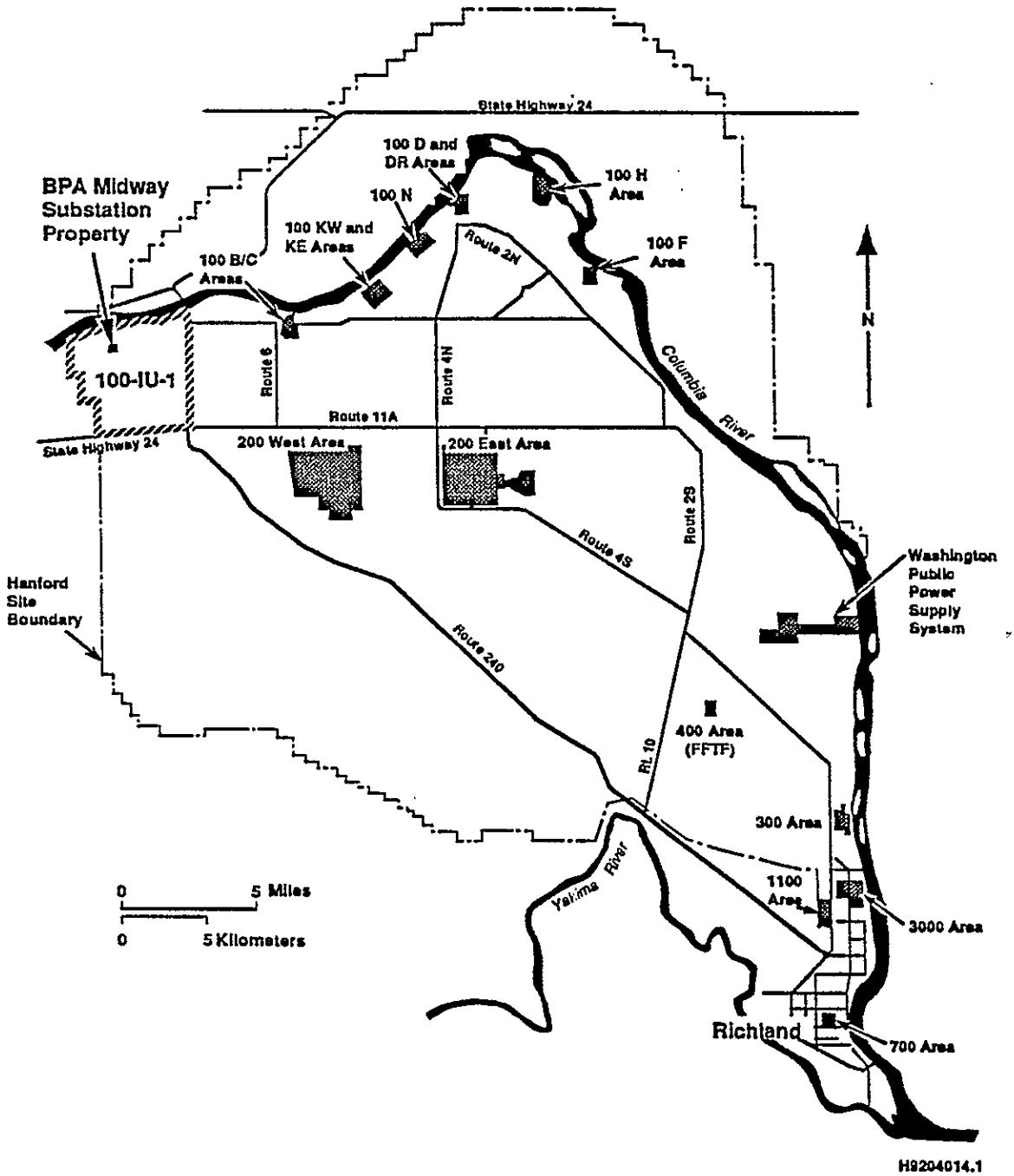

Figure 1. 100-IU-1 Operable Unit.

4.2 MEASURE OF SUCCESS

Success of the ERA will be measured in terms of stabilization or removal of the potential environmental threats posed by the operable unit. Implementation of the action at the operable unit would result in the immediate reduction in the quantity of available contaminants that may cause further contamination of the environment.

4.3 IMPLEMENTATION

The process for implementing the ERA will follow the format outlined in the Tri-Party Agreement. The ERA is considered to be non-time critical, such that a planning period of at least 6 months could occur prior to initiation of the activity. Implementation of a non-time critical ERA requires an engineering evaluation/cost assessment (EE/CA) be conducted and results submitted to the lead regulatory agency. The EE/CA will be contained in an ERA proposal that will provide the additional details necessary for implementing the alternative chosen by the EE/CA. The outline of the ERA implementation process is briefly described in the following sections.

4.3.1 ERA Project Plan

An ERA project plan will be prepared that outlines how the ERA will be implemented (Attachment 3 provides an outline for the project plan). The project plan will identify each of the alternatives to be considered by the EE/CA and the site evaluation tasks necessary to evaluate the alternatives. This plan is a secondary document as defined by the Tri-Party Agreement.

4.3.2 Site Evaluation

The site evaluation will use field screening techniques to identify the nature and extent of the environmental hazards associated with the site. Information necessary for the stabilization/remediation of the fuel tank and wash pit will be obtained. Samples will be taken from areas believed to contain hazardous wastes. A cone penetrometer survey or other sampling technique will be used to determine the extent of contamination in the soil column.

The information obtained by the site evaluation is essential for completing the EE/CA in which the restoration alternative is chosen. In addition, the data will be useful in assessing worker health and safety requirements while implementing the ERA. The results of all site evaluation activities will be documented in the ERA proposal.

4.3.3 ERA Proposal and Action Memorandum

The ERA proposal includes the EE/CA, which evaluates the various alternatives considered with recommendations based on the results of the site evaluation activities. The EE/CA provides refinement and specification of the alternatives, followed by a detailed analysis based on; 1) public health and

welfare, and environmental impacts, 2) technical feasibility, 3) institutional considerations, and 4) cost.

Also included in the ERA proposal is a tentative schedule for implementation of the recommended alternative as well as a project management/implementation plan. Attachment 4 provides an annotated outline suggested for the ERA proposal.

The ERA proposal will undergo a DOE, EPA, and Ecology review. The public will also be allowed to review the document. As specified in the Tri-Party Agreement, the EPA will ultimately be responsible for issuing an ERA Action Memorandum, providing the direction to proceed with the activities proposed in the ERA proposal.

4.3.4 Project Implementation

Following approval of the ERA proposal and issuance of the ERA Action Memorandum, the chosen alternative will be implemented.

4.3.5 Reporting

Upon completion of the ERA, a final report assessing and evaluating the ERA will be prepared for distribution. It is hoped this report will provide sufficient information to support the record of decision for the operable unit.

4.4 SITE SELECTION WORKSHEET

An ERA site selection worksheet for this ERA is attached (Attachment 4).

4.5 COST AND SCHEDULE SUMMARY

A preliminary cost estimate and schedule for implementing the ERA is provided (Attachment 5). Note the cost and schedule estimates reflect the assumption of minimal radiological and hazardous wastes.

5.0 REFERENCES

Ecology, EPA, and DOE, 1990, *Hanford Federal Facility Agreement and Consent Order*, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.

DOE/RL, 1991, *Hanford Facility Legal Description*, DOE/RL-91-28, Rev. 0, Appendix 2B-3, U.S. Department of Energy-Richland Field Office, Richland, Washington.

WIDS, 1988, *Waste Information Data System*, Westinghouse Hanford Company, Richland, Washington.

ATTACHMENT 1

REQUEST FOR PROPOSALS

Ecology letter dated March 4, 1992.

9201739

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

March 4, 1992

Mr. Steven H. Wisness
Hanford Project Manager
U.S. Department of Energy
P.O. Box, 550 A5-19
Richland, WA 99352

Re: Expedited Responses Action Planning Proposals and Implementation

Dear Mr. Wisness:

On January 22, 1992, a meeting was held to discuss the selection of new Expedited Response Actions (ERA). The Washington State Department of Ecology (Ecology) and the U.S. Environmental Protection Agency (EPA) assumed the task of identifying candidate sites for planning proposal preparation, and identification of lead regulatory agency.

The primary reasons to perform ERAs are to minimize or eliminate the potential for release of hazardous substances and/or radionuclides in the environment and to initiate actions consistent with anticipated remedy selections. The final remedy selection would be made after completion of a Remedial Investigation/Feasibility Study (RI/FS) or a RCRA Facility Investigation/ Corrective Measures Study (RFI/CMS).

On December 12, 1991, a meeting was held to discuss selection of new ERAs. In this meeting, the U.S. Department of Energy (DOE) and Westinghouse Hanford Company (WHC) provided EPA and Ecology with a list of twenty-two (22) candidate sites. In addition, DOE and WHC were seeking approval to proceed with EE/CA preparation for the 300 Area Burial Grounds. Based on this meeting and a continuing dialogue between Ecology, EPA, DOE, and WHC, four (4) sites from the candidate list have been selected for planning proposal preparation. In addition, we request DOE submit planning proposals for two additional sites that were drafted previously for DOE, but as yet have not been submitted to Ecology and EPA.

Ecology and EPA prefer to delay initiation of an ERA on the 300 Area Burial Grounds. With the use of test pits in both the liquid disposal sites and the burial grounds, it appears the schedule for completion of RI/FS activities in 300-FF-1 may be accelerated. In addition, treatability tests planned for this year may identify appropriate means for remediating contaminated sediments from the liquid disposal sites as well as the burial grounds. Early completion of these investigations could result in a final Record of Decision for the 300-FF-1 Operable Unit earlier than projected. Ecology and EPA prefer

this course of action because it would potentially eliminate the need to handle waste from the burial grounds twice (once as part of the ERA and again as part of the final remedy).

Ecology and EPA have selected the following four sites for planning proposal preparations:

Sodium Dichromate Barrel Disposal Landfill in 100-IU-4 Operable Unit

The sodium dichromate barrel disposal site in the 100-IU-4 Operable Unit was selected in part due because this is the only facility located within the 100-IU-4 Operable Unit. Also, early remedial action at this operable unit may abate the potential of more extensive environmental degradation. Any ground water contamination from the sodium dichromate barrel site would be addressed as part of the 100-HR-3 Operable Unit. Removal of drums and contaminated sediments from this site may completely remediate the 100-IU-4 Operable Unit or may result in a no further action record of decision. This ERA would be designated as an Ecology lead site due to its location within the 100-HR-3 ground water operable unit for which Ecology is also the lead regulatory agency. An ERA at the sodium dichromate barrel disposal site should not require extensive planning or characterization prior to initiation and therefore field work should begin in fiscal year 1992.

U.S. Bureau of Reclamation 2,4-D Burial Site in 100-IU-3 Operable Unit

The U.S. Bureau of Reclamation 2,4-D burial site in the 100-IU-3 Operable Unit was also selected in part because it is the only documented hazardous waste disposal area located north of the Columbia River on the Hanford Site. In addition, this site is one of the few waste sites where DOE does not control access. Removal of drums and contaminated sediments from this site could eliminate the primary source of hazardous waste from this part of the Hanford Site and enhance public safety. The north slope area of the Hanford Site has been of particular interest to Ecology due to public access and the existing lease agreement between DOE and the Washington State Department of Fish and Wildlife. Ecology would be designated lead regulatory agency for both this ERA and the 100-IU-3 Operable Unit.

White Bluffs Pickling Acid Crib in 100-IU-5 Operable Unit

The White Bluffs pickling acid crib in the 100-IU-5 Operable Unit represents a significant source of acidic metal waste solution. This waste was generated from the final cleaning of reactor cooling pipes prior to installation in Hanford's eight single-pass reactors. These liquid disposal sites are located approximately one mile west of the 100-F Area near the old White Bluffs town site. Again, this site represents the primary source of contamination within the 100-IU-5 Operable Unit and a removal action at this facility will likely limit

the need for and extensive investigation through an RI/FS. Since little is known about the extent of contamination associated with the White Bluffs pickling acid crib, some degree of characterization will likely be required as part of an ERA at this site. Due to its location upgradient of 100-F Area, EPA would be designated as lead regulatory agency for both this ERA and the 100-IU-5 Operable Unit.

100-IU-1 River Rail Wash Pit and 600 Area Army Munitions Burial Site

The 100-IU-1 operable unit contains two units. The riverland railroad car wash pit was decontaminated in 1963, and subsequently released from radiation zone status. Site records indicate that all items were removed from the munitions burial site in 1986. These sites are both located west of Highway 240 and lack the access controls present at nearly all other past practice sites at Hanford. EPA will be lead agency for this ERA and the 100-IU-1 Operable Unit. This presents the potential opportunity to reach a decision to take no further action at an operable unit after performing a confirmatory investigation. We expect that the entire investigation could be done as part of the ERA. If that is the case, the ERA would be followed by administrative steps to reach a final ROD.

Planning proposals for two additional sites are already drafted, but not released. These are for the 100 Area river outfall pipes and the 618-11 burial ground. These planning proposals should be transmitted to Ecology and EPA without delay. The regulatory lead agency will be identified for these proposals in the notice to proceed with EE/CA preparation.

Should you have any questions about the selection of candidate sites for planning proposal preparation or implementation, please contact either Steve Cross of Ecology (206) 459-6675 or Doug Sherwood of EPA (509) 376-9529.

Sincerely,

Paul T. Day
Hanford Project Manager
EPA Region 10

David H. Jansen, P.E.
Hanford Project Manager
Washington State
Department of Ecology

cc: T. Veneziano, WHC

ATTACHMENT 2

WASTE INFORMATION DATA SYSTEM SHEETS

Waste Information Data System
General Summary Report
December 19, 1991

SITE NAME: Riverland Railroad Car Wash Pit [309]

SITE TYPE: Pit [309]
WASTE CATEGORY: Nonhazardous/Nonradioactive [309]
WASTE TYPE: Solid [309]

STATUS: Inactive [309] Pre-1980 [309]
START DATE: 1940's [309]

OPERABLE UNIT: 100-IU-1 [329]
O.U. CATEGORY: Undefined [323]

This site is included in the Tri-Party Agreement Action Plan [329]

PNL Hazardous Ranking System Migration Score: 23.70 [309]

HANFORD AREA: 600 Area [309]
COORDINATES: N65695 W102025, N65870 W102000 [309]
LOCATION: ~5 mi west of State Highway 240 and ~1/3 mi southwest of the Vernita Bridge [309]

WATER TABLE DEPTH: 185.00 feet below grade [309]

SITE DIMENSIONS:

Length:	40.00	feet [309]
Width:	6.00	feet [309]
Depth:	3.00	feet [309]

SITE DESCRIPTION: The site is trench-like in appearance [309].

WASTE TYPES AND AMOUNTS: The site was used as a steam cleaning and low-level decontamination station for locomotive engines and cars used at Hanford [309].

CLEANUP ACTIONS: In 1963, the entire site was decontaminated, released from radiation zone status, and the building auctioned to the general public [309].

Waste Information Data System
General Summary Report
April 22, 1992

SITE NAME: 600 Area Army Munitions Burial Site [315]

SITE TYPE: Burial Ground [315]

WASTE CATEGORY: Hazardous Waste [315]
WASTE TYPE: Solid [315]

STATUS: Inactive [315] Pre-1980 [315]
START DATE: 1971 [315]
END DATE: 1976 [315]

OPERABLE UNIT: 100-IU-1 [329]
O.U. CATEGORY: Undefined [325]
SWMU: Yes [606]
TPA: Yes [329]

HANFORD AREA: 600 Area [315]
LOCATION: ~100 meters west of Gate 121 [315]

SITE DIMENSIONS:
Length:	2.00	feet [315]
Width:	3.00	feet [315]
Depth:	2.00	feet [315]

SITE DESCRIPTION: The unit is a shallow cache [315].

WASTE TYPES AND AMOUNTS: The unit received military explosives as follows: 6 gun blast simulators, Model 110, dated October 1953; 78 boxes (packed 5 to a box) of fuse ignitors; Model M60, Lot KYC-1, dated May 1960; one trip flare, Model M49; one can containing 50 nonelectrical blasting caps, marked "ARMY"; 43 electrical blasting caps; ~500 ft of time fuse; ~200 ft of detonating cord; and remnants of one grenade or artillery simulator [315].

COMMENTS: Burial dates are estimated based on the rotted condition of the buried wooden crates [315].

RELEASE POTENTIAL: There is no potential for release; the contents of the site have been removed [315].

CLEANUP ACTIONS: On May 22, 1986, all items were removed and transported to the Yakima Firing Range for destruction [315].

ATTACHMENT 3

PROJECT PLAN OUTLINE

ERA PROJECT PLAN

1.0 INTRODUCTION
- 1.1 PURPOSE
- 1.2 BACKGROUND
- 1.3 ORGANIZATION

2.0 SITE CHARACTERISTICS
- 2.1 FACILITIES/STRUCTURES
- 2.2 GEOLOGY/SOIL
- 2.3 HYDROGEOLOGY

3.0 PRELIMINARY IDENTIFICATION AND SCREENING OF ALTERNATIVES

4.0 SITE EVALUATION TASKS

5.0 ERA PROPOSAL TASKS

6.0 ERA DESIGN AND IMPLEMENTATION TASKS

7.0 PROJECT SCHEDULE

8.0 REFERENCES

ATTACHMENTS

1 Sampling and Analysis Plan
2 Health and Safety Plan
3 Project Management Plan

ATTACHMENT 4

ANNOTATED ERA PROPOSAL OUTLINE

1.0 INTRODUCTION

The introduction defines the purpose and scope of the ERA proposal. The discussion includes the various reasons and requirements for performing the ERA. The relationship between the ERA and the ongoing remedial investigation/ feasibility study activities will also be described.

2.0 SITE DESCRIPTION

This section provides a brief description of the site being considered for an ERA. A summary of the information that is pertinent to the selection of the preferred alternative is included.

3.0 SITE EVALUATION ACTIVITIES

This section describes the activities conducted for characterization of the site. Information gathered during those activities are also included, evaluated, and summarized.

4.0 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

This section identifies applicable or relevant and appropriate requirements to be considered in the engineering evaluation/cost analysis.

5.0 IDENTIFICATION OF RESPONSE TECHNOLOGIES

Response technologies that could achieve the objectives of the ERA are evaluated. A summary of the evaluation process is provided.

6.0 ANALYSIS OF RESPONSE ACTION ALTERNATIVES

Various response action alternatives are assembled and evaluated. Those alternatives warranting further evaluation are summarized.

7.0 ENGINEERING EVALUATION/COST ANALYSIS

Each criterion to be used to evaluate the ERA alternatives summarized in Section 6.0 is identified in this section. The method of scoring the alternatives against these criteria is also explained.

8.0 IMPLEMENTATION OF PREFERRED ERA ALTERNATIVE

This section provides a discussion detailing the implementation of the preferred ERA alternative chosen in Section 7.0. All procedures that will be used or that need development will be identified. All permits, such as excavation permits and Hazardous Waste Operators Permits, will also be mentioned. Health and safety, waste management, waste minimization, and environmental monitoring will be discussed.

9.0 PROJECT MANAGEMENT PLAN

Each of the organizations that will participate in the implementation of the ERA and their roles is identified in this section. A flow chart showing the management structure, a detailed schedule for implementation, and cost estimates for implementing the ERA activity are provided.

ATTACHMENT 5

ERA SITE PRIORITIZATION WORKSHEET

SITE SELECTION WORKSHEET

Project Name: River Rail Wash Pit and 600 Area Army Munitions Burial Site

Project Description: This project's scope is to eliminate the hazards associated with the Wash Pit and Munitions Burial Site.

ERA Category: Time Critical __ Non-Time Critical X

Evaluation Checklist

Time Critical ERAs:

Actual Exposure/Release Yes__ No X

Imminent Exposure/Release Yes__ No X

Rationale:

Non-Time Critical ERAs:

1. Potential Exposure: Yes X No__

   Rationale: The River Rail Wash Pit must be checked to ensure previous radiation clean up activities meet today's standards.

2. Potential Increased Degradation: Yes X No __

   Rationale: Any residual radioactive contamination at the River Rail Wash Pit has the potential to migrate.

3. Implementability: Yes X No __

   Rationale: The project may require a small scale hazardous and/or radiological cleanup and a confirmatory investigation to justify a decision for "No further action required".

4. Short-Term Effectiveness: Yes X No __

   Rationale: By removing any hazardous present, this project will be effective in the short term.

5. Reduction of Toxicity, Volume, Migration: Yes X No __

   Rationale: Project implementation would minimize or eliminate any toxicological and migratory hazards that may be present.

6. Cost Effectiveness: Yes _X_ No __

Rationale: Project activities could occur at a relatively minimal cost. It would be more advantageous to perform these activities now rather than allow further environmental degradation.

7. Long-Term Effectiveness: Yes _X_ No __

Rationale: By removing any hazardous present, the project will be effective in the long term.

8. Consistent with Final Remedy: Yes_X_ No __

Rationale: Removal of the environmental hazards is consistent with final remediation goals. Actions taken are likely to be the final remedial efforts needed in the unit. These actions may result in a No Further Action ROD.

9. Compliance with ARARs: Yes _X_ No __

Rationale: The project shall attempt to achieve final ARARs.

10. Information for RI/FS or Remedial Design: Yes _X_ No __

Rationale: If significant environmental hazards are encountered, the data obtained from implementing the ERA would provide useful information to future RI/FS activities within the operable unit as well as other restoration/remediation projects conducted both on and off the Hanford Reservation.

11. Demonstrate Technologies: Yes _X_ No __

Rationale: A Cone Penetrometer survey is proposed for use in evaluating the extent of contamination at the sites. If system use is successful at the sites, future use at significantly more hazardous "type" disposal sites located at Hanford and elsewhere may result in safer and more cost effective environmental investigations.

12. Community Acceptance: Yes _X_ No __

Rationale: Positive public acceptance is anticipated due to the expedited removal of environmental hazards. These sites are both located west of highway 240 and lack the controls present at nearly all other past practice sites at Hanford. In addition, this project will support the final record of decision for the unit.

ATTACHMENT 6

100-IU-1 OPERABLE UNIT EXPEDITED RESPONSE ACTION PRELIMINARY SCHEDULE AND COST ESTIMATE

The attached cost and schedules estimates for the proposed ERA is preliminary and should be considered rough order-of-magnitude. The basis for many of the costs is based upon actual costs for the 316-5 Process Trenches and 618-9 Burial Ground ERA's. The estimate includes a 25% contingency cost factor. A more definitive cost and schedule will be provided in the ERA proposal.

The following 100-IU-1 Operable Unit preliminary cost and schedule information provides limited investigation and environmental cleanup activities to support a ROD decision.

This rough order-of-magnitude cost estimate and schedule is based on available data and assumed remedial actions. Additional data about site conditions and health and safety requirements will produce more definitive estimates. The ERA proposal will provide an accurate cost estimate for the selected remediation alternative(s).

The site activities include performing limited sampling and analysis at suspected hazardous material disposal sites. These sites include the river rail wash pit, Building 6718 buried fuel tank location, and H-70 landfill. A cone penetrometer shall obtain the samples. At this time, low level radioactivity is expected at the river wash pit.

The cost breakdown is as follows:

PROJECT MANAGEMENT COSTS:		
Project Manager	0.1 FTE/yr @ 2 yr	20,000
Project Engineer	1.0 FTE/yr @ 2 yr	200,000
Clerk/Typist	0.1 FTE/yr @ 2 yr	20,000
Quality Assurance	0.125 FTE/yr @ 2 yr	25,000
Health/Safety	0.125 FTE/yr @ 2 yr	25,000
Facility Safety	0.5 FTE/yr @ 1 yr	50,000
Permits (ie NEPA)	0.125 FTE/yr @ 0.5 yr	7,000
Community Relations	0.125 FTE/yr @ 2 yr	25,000
PRELIMINARY INVESTIGATION:		
Sampling, Analysis, and Validation		150,000
Cone Penetrometer (12 cones)		36,000
ERA PROPOSAL DEVELOPMENT:		58,000
PROJECT IMPLEMENTATION:		
Mobilization		5,000
Demolition & rubble cleanup/disposal		30,000
Backfill holes and depressions		25,000
Replace/Install signs & fencing		25,000
Sampling, Analysis, and Validation		150,000
Hazardous Waste Disposal		70,000
Subtotal		$921,000
Contingency (25%)		230,000
TOTAL		$1,151,000

(Note that these costs are rough order-of-magnitude and are subject to vary with the defined work scope.)

The following schedule is based on existing data. The ERA project plan will contain revised schedules.